Descriptive Video: Roland Galarneau, the inventor of the Converto-Braille

Audio Description: Animation: Fingers move across Braille lettering. Voiceover.

Roland Galarneau: I was born with only 2% of my vision.

Audio Description: Caption: Roland Galarneau, Self-taught Machinist, mid 1960s. In his workshop, Roland reads documents in Braille, while a sighted man stands nearby reading a newspaper.

RG: And I can tell you that the blond has to be 10 times as good as the sighted to get the same job. But too much of the world is beyond reach. If Braille were easier to produce, more material would connect us to a world designed for those with sight.

Audio Description: Caption: Gatineau, Quebec. The sighted man, Adrien Filiatreault, constructs a machine, while Roland supervises, referring to his Braille documents.

RG: I'm not an engineer, but I envisioned a machine — one that anyone could use to type text that would automatically translate into braille. My friend Adrien was my eyes and my hands.

Audio Description: Close-up of Adrien's hands, as he solders wires inside the machine. As the years go by, Roland stands over Adrien's shoulder, instructing him every step of the way.

RG: It took endless trial and error. More than 10,000 hours of painstaking work to build the Converto-Braille.

Audio Description: Caption: 1972. A view of the original Converto-Braille machine. It resembles a large typewriter, with a complex system of levers, buttons, and wires.

RG: Not long after, we set about publishing the latest textbooks, even the daily newspaper. It was all unlocked by a single device.

Audio Description: Caption: Rolan Galarneau, 1922-2011. In front of a massive, floor-to-ceiling computer, Roland hands a braille textbook to a teacher. Then, in a classroom, the teacher gives the book to a student.

Narrator: Roland Galarneau's machine was the first of its kind: A computerized printer capable of translating text into Braille at one hundred words per minute. This Canadian innovation opened up a new world for the visually impaired.

Audio Description: Hashtag: Inspiring Innovators. Logos: Historica Canada and the Rideau Hall Foundation.